

REMARKS

Objection to the Drawings Under 37 C.F.R. §1.83(a)

The drawings were objected to under 37 C.F.R. §1.83(a) on the assertion that the drawings must specify every feature of the invention specified in the claims. In particular the drawings were objected to on the assertion that they did not show the "ash box at the other end of said cylinder" as recited in the claims. As amended herein Claim 2 now recites that the ash box is at the other end of the cell. Consistent with this amendment, Figure 1 shows that ash box 7 is at the other end of cell 1. Accordingly, Applicant maintains that the drawings specify all the features recited in the claims and respectfully requests that this objection be removed.

Rejection under 35 U.S.C. § 112, second paragraph

The Examiner has rejected Claims 2-4 under 35 U.S.C. § 112, second paragraph on the assertion that they are indefinite with regards to the claimed invention. Specifically, Claim 2 was rejected as being incomplete with regard to the necessary structural connections of the invention because the terminology "gas recuperator" lacked antecedent basis .

Claim 2 has been amended to delete the terminology "gas recuperator" and replace it with the terminology "recovery chimney, in connection with said cell, for recovering pyrolysis gases from said cell." Support for this amendment is found in the specification, on page 4, lines 16-17 and 21-22, and in reference number 6 of Figure 1.

In addition, Claim 2 has been amended to replace the terminology "cylinder" with "cell," thereby clarifying the locations of the "hopper" and "ash box". Page 4, lines 26-29 of the specification states that the rotating cell is composed "of a cylindrical part 9, constituting the pyrolyser, in combination with a frustoconical part 10". In addition, page 4, lines 13-15 discloses the location of the hopper at one end of the rotating cell and page 4, lines 18-20 discloses the ash box at the other end of the rotating cell. Accordingly, this amendment is supported in the specification.

In view of the foregoing, Applicant respectfully requests withdrawal of the rejections to Claims 2-4 under 35 U.S.C. § 112, second paragraph.

Rejection under 35 U.S.C. § 102(b) over Giraud

The Examiner has rejected Claims 2-4 under 35 U.S.C. § 102(b) on the assertion that they are anticipated by Giraud (U.S. Patent No. 3,916,806).

As recited in Claim 2, the present invention comprises a retaining threshold between the cylinder and the truncated cone, which retains the waste and allows the waste to come in contact with itself in a small volume while receiving a small amount of oxygen, thereby making it possible to obtain a coke which is used in the generator cone as fuel to provide the hot gas flow necessary for the pyrolysis (See specification at page 3, lines 16-38). In addition, as recited in Claim 3, the retaining threshold is formed by a difference between the diameter of the cylinder and the truncated cone. This is evident in Figure 1 and page 4, lines 32-35, where the diameter of reference number 12 is larger than the diameter of reference number 13. The retaining threshold (11), is formed between these two diameters. This feature is not disclosed in Giraud.

The Examiner asserts that Giraud discloses a "retaining threshold" as described in Figure 11 and in column 11, line 58 to column 12, line 20. The Applicant respectfully maintains that Giraud does not disclose a retaining threshold. It is clear from Figure 11 of Giraud that the diameter of the cylinder portion of the combustion chamber and the large base of the truncated cone are the same. This design indicates a change in slope from the cylinder portion to the large base of the truncated cone. Specifically, column 11, lines 63-65, state "the chamber has a free surface the slope of which is that of the landslide angle." Therefore, there is no intermediary region between the cylinder and the large base of the truncated cone as recited in the present claims.

Because the device disclosed in Giraud lacks the retaining threshold positioned between the cylinder and the truncated cone, the device of Giraud does not allow the waste to come in contact with itself in a small volume while receiving a small amount of oxygen, thereby making it possible to obtain a coke which is used in the generator cone as fuel to provide the hot gas flow necessary for the pyrolysis. Therefore the device disclosed in Giraud lacks the advantages of the present invention.

In addition, Applicant notes that the combustion chamber of Giraud oscillates around its longitudinal axis (Abstract, specification column 1, lines 64-66, throughout the specification and

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Claim 1). In contrast, as recited in Claim 2, the cylinder and truncated cone rotate (page 4, lines 10-12).

For the foregoing reasons, Applicant maintains that the present invention is not anticipated by Giraud. Therefore, the Applicants respectfully request withdrawal of the rejection to Claims 2-4 under 35 U.S.C. § 102(b).

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully asserts that the present application is fully in condition for allowance. If any issues remain that may be addressed by a phone conversation, the Examiner is invited to contact the undersigned at the phone number listed below.

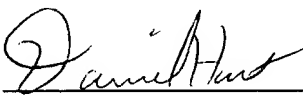
The changes made to Claim 2 by the current amendment, including insertions which are double underlined and ~~deletions which are stricken through~~, are shown on an attached sheet entitled **VERSION WITH MARKINGS TO SHOW CHANGES MADE**, which follows the signature page of this amendment.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

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Dated: May 23, 2001

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

2. (Twice Amended) An apparatus for the pyrolysis of waste, comprising a rotating cell formed of a cylinder, said cylinder having a diameter and two ends, in combination with a truncated cone rotating on the same axis, said truncated cone having a large base and a small base, said large base and said small base each having a diameter, a hopper for charging the waste at one end of said ~~cylinder~~cell, an ash box at the other end of said ~~cylinder~~cell, a ~~gas recuperator~~recovery chimney, in connection with said cell, for recovering pyrolysis gases from said cell, and a retaining threshold between the cylinder and the truncated cone, creating a region of intimate contact of the waste with itself, whereby the waste is converted into coke which is used as fuel in the pyrolysis of the waste.